WHITE (J.C.) & WHITE (C.J.) Compliments of the writers

A CASE OF LYMPHANGIOMA OF LABIA MAJORA VULVÆ.

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LYMPHANGIOMA OF LABIA MAJORA VULVÆ.[1]

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I DESIRE to place upon record a brief account of a case of this disease, which has recently come under my observation. The patient was sent to me by Dr. W. of Maine for an opinion regarding the nature of an affection of the external genitalia.

The patient was unmarried and twenty-seven years old. She first consulted her physician on account of a trouble in her left leg, which he thus describes: "Miss X. first came under my professional notice in 1890 for a swelling of the left leg below the knee. It was decidedly edematous, white, and shiny. I could discover no cause whatever to account for it. The leg had been in this condition for about two years, but had never been red or inflamed. I tried bandaging, and treated her general health. There being no improvement, I took her in 1891 to consult a surgeon in Portland, but a careful examination failed to find any sufficient cause for the edema. As she not only did not improve, but the other leg had begun to enlarge, in 1893 I called in a gynecologist, who expressed the decided opinion that there was a pelvic tumor interfering with the circulation, but she would not submit to any examination. Later in the same year both legs on one occasion, after unusual exercise, became not only edematous, but red and highly inflamed. About this time it was found that the heart's action was not normal. Subsequently she kept having frequent attacks of cutaneous inflammation of the legs."

Dr. W.'s attention was not called to the condition of the vulva until two months before I saw her, in December of last year. I found the outer labia greatly thickened, of dense consistence, and somewhat compressible. Their outer aspect is thickly occupied by closely compacted outgrowths, varying in size from a very small to a large pea, of a dull red color, with rugous summits like warts, not smooth like genital papillomata. They are distinctly separated down to their base. Similar growths occupy the inner surfaces of the greater lips a little way downward from their edges. The

[1] Read at the meeting of the American Dermatological Association at Washington, May 6, 1897.

lesions are firm individually, but they may be flattened down to half their elevation by long-continued pressure. They are not painful under such manipulation. Some moisture is noticed between them, and the patient says there is often a considerable discharge from the surface, which stains and stiffens the clothing. Does not know that any of the growths have ever ruptured, or that they looked at first like vesicles, but says she never made a close examination of the parts. She thinks there was no marked edema of the lips before the growths appeared. There is no itching of the parts now, but before their development there was intense pruritus vulvæ for a year or two. The inner labia are somewhat thicker and firmer than normal, but their surface is natural. The clitoris is unchanged. The glands in the groin are unaffected, and no change in the lymph-vessels of the legs can be detected. The growths have increased in number very gradually, she says. The attacks of diffused dermatitis of the legs have affected large areas, and have been so painful that she has been obliged to remain in bed several weeks each time.

Much attention has been given within the last few years to the subject of lymphangioma of the female external genitals, and a careful study of some individual cases has been made, especially by Drs. Roberts (*British Journal of Dermatology*, August, 1896), Malherbe of Nantes (*Annales de Dermatologie et de Syphiligraphie*, March, 1896), and Heuss of Zurich (*Monatshefte für Praktische Dermatologie*, July 1, 1896). The photographs of the gross appearances of the parts which accompany the latter two papers closely resemble those presented by my own case, and I exhibited them in illustration of it. The absence of any marked generalized elephantiasis of the parts, primary or secondary, is to be noted in these as well as in my own case. The differences in the gross appearances of the two affections is strikingly shown by comparing these photographs with one (now exhibited) of the labia of a tattooed South Sea Islander. A wide variation has been found in the anatomical changes, especially in those of the lymph system, in the individual cases.

Dr. W. kindly removed one of the smaller outgrowths by excision on her return, and sent it to me. It was given to my son, Dr. Charles J. White, for examination, who furnishes the following report and drawing:

ANATOMO-PATHOLOGY.

The piece excised for examination was a small tubercle growing upon one of the labia majora. The specimen was hardened in alcohol, embedded in celloidin, and cut in thin sections, which were

stained by hematoxylin eosin, by Grübler's orcein, by the Gram-Weigert method, and by a mixture of methylene-blue and carbonate of potash.

Studying the sections stained by hematoxylin eosin, we find the following conditions: The stratum corneum appears practically normal, with here and there a faint suggestion of nucleation in the lower row of cells.

The stratum lucidum is not apparent.

The stratum granulosum is more than usually prominent—in some places presenting six or seven rows of cells, which toward the rete Malphigii show distinct vacuolation.

The rete Malphigii is clearly hypertrophied, exhibiting frequent interpapillary down-growths. The layer as a whole stains poorly, owing to the marked edema, which obliterates the spines of the individual cells, and, in places, quite separates the cells one from another. No mitoses could be discovered.

The Derma.—Papillæ appear slightly edematous, and at rare intervals contain slightly dilated lymph-vessels cut in transverse or in longitudinal section.

The basal tissue immediately subjacent to the papillæ shows a slight edema, but in other respects presents no divergence from the normal. When, however, we reach the connective tissue which supports the upper layer of vessels, we find a distinct round-cell infiltration surrounding many small dilated lymph-vessels, cut as a rule in cross-section.

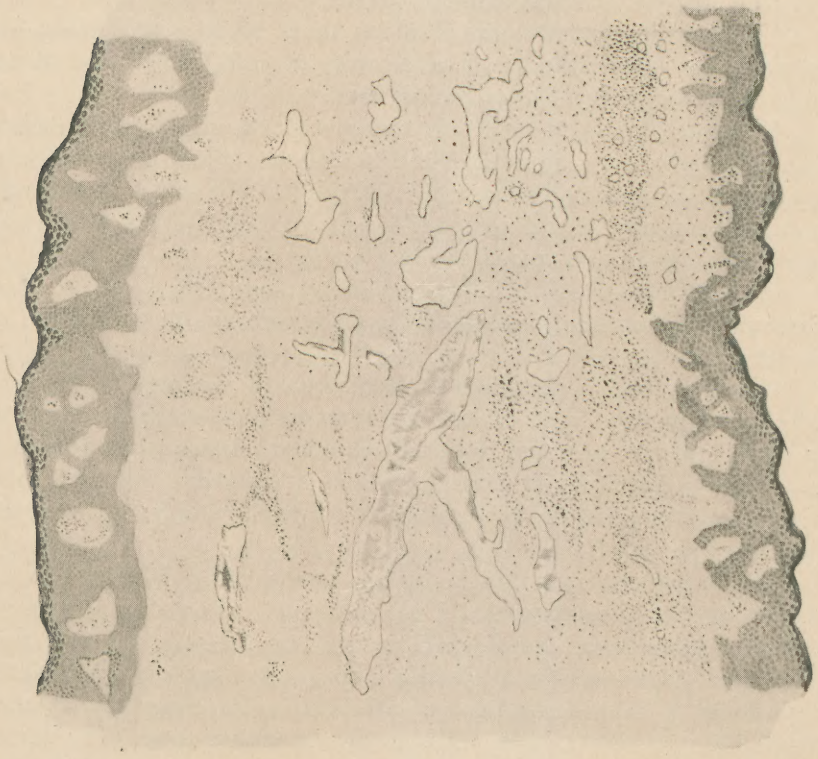
In the deepest layers of the corium one sees the essential process in its highest development. Here one finds many dilated lymph-vessels and enlarged lymph spaces, which in places appear as large, irregular-shaped lacunæ filled with a coagulated mass which absorbs the eosin in varying intensity. In places this coagulum appears mesh-like; in others, of a uniform homogeneity, containing rarely a few leucocytes. It is, however, only in the larger channels that we find any contained matter, for the numerous small vessels are quite empty. Evidences of inflammation about the larger channels are not so conspicuous as about the smaller ones, and even there the invasion of leucocytes is far less marked than in the upper layers of the derma. As a rule, the lymph-vessels are lined with a layer of endothelial cells, although here and there one may find an exception.

The sections stained by the methylene-blue process disclose the presence of plasma and mastzellen in moderate quantities.

On looking at the sections stained by orcein, one is struck by the

great scarcity of elastic fibers. It is only in the deeper portions of the cutis that one sees the fibers assuming in any degree whatever their normal numbers, while in the papillæ they are practically absent. Perhaps this paucity of elastic fibers can be explained by the

FIG. 3.



abundant edema of the parts, for a similar disappearance has been noted by W. Peter in kraurosis vulvæ wherever edema and round-cell infiltration were marked.

Sebaceous and sweat-glands and hair-follicles did not occur in the section.

The strictest search for bacteria was futile.

We have to deal here with a process clearly lymphatic in structure; in other words, with a class of diseases which are by no means common, and the varieties of which have not yet, to my mind at least, been definitely classified.

At the outset of our investigation we meet with a difficult task—that is, to decide whether the present case is an example of a dilatation of preexisting vessels, or whether we have to deal with a true new growth of the same. For my part I am unable to determine this positively. Against the probability of a lymphangioma we note the absence of any budding of the smaller vessels, the lack of any mitoses, and the non-evidence of the lymphangioblasts which Török has described. Militating against the idea of lymphangiectasis, we see how abundant are the round cells about the small vessels, and how less numerous in the vicinity of the larger ones, suggesting to my mind the possibility that this plentiful exudation of formative elements means a further increase of new lymph-channels. Another, and perhaps more conclusive evidence against a simple dilatation of preexisting vessels, is the point that there is a strong suggestion of lymph-vessels in the papillæ, a region which is supposed normally to contain no such elements.

For these reasons I am unable to state definitely the exact nature of the lesion under consideration. I must, however, confess that I am inclined somewhat to the theory of a true lymphangioma with concomitant lymphangiectases.

Assuming this to be true, in what clinical and anatomical subdivision are we to place our case? There is a seeming unanimity of opinion among the writers of text-books which place changes in the lymph-vessels under the following heads: First, those where the lesion is superficial; and, second, those in which the hypoderm is the seat of the disturbance.

On this basis we find subdivisions which, under the superficial type, are described as (1) lymphangioma superficiale simplex (angioma circumscriptum), and (2) lymphangioma superficiale on the basis of deep lymphangiectatic processes. Under the subcutaneous type we find (*a*) lymphangioma tuberosum multiplex of Pospelow, (*b*) lymphangioma subcutaneum solitare, and (*c*) lymphangioma of the subcutaneous vessels. These are genera of Unna, and the latest editions of the works of American and European dermatologists agree with them closely.

I cannot reconcile this process clinically or anatomically with the disease called lymphangioma circumscriptum. Let us recall the clinical description given above. We do not note closely grouped, superficial, frog-spawn-like vesicles, with here and there suggestions of warty growths; nor do we find the lesion situated upon the chest, neck or shoulders—the classical seats. On the contrary, we have a much deeper process lying in the swollen tissues of the labia. From

the histological aspect lymphangioma circumscriptum is entirely out of the question. Török defines this as a process in which we find the "changes almost exclusively in the papillary body and in the subpapillary layer of the cutis. The epithelium is merely passively thinned, and the prickle layer reduced to two layers of cells,"[1] conditions which we see quite reversed in our case.

According to our histological examination we must necessarily rule out the second division of lymph-tumors—the hypodermic. Therefore, if we are to adhere to existing nomenclature, we are forced to call our case one of "lymphangioma superficiale, on the basis of deep-lying lymphangiectatic processes," and to my mind there are sufficient grounds for such a diagnosis when we take into consideration the history and the anatomy of our case.

C. J. W.

[1] Unna, *Orth's Pathologische Anatomie*, Band II. s., 938.